

What is claimed is:

- 1 1. A computer for use in a pervasive computing system, comprising:
2 a wireless detector operable for detecting identifications from one or
3 more other computers;
4 a central processing unit coupled to the wireless detector; and
5 a memory coupled to the central processing unit such that in operation
6 the memory stores log entries for selected ones of the identifications and
7 further such that in operation the central processing unit of the computer
8 recognizes an event based upon a pattern recognition algorithm that
9 evaluates the log entries.
- 1 2. The computer of claim 1 wherein the event is a reminder event.
- 1 3. The computer of claim 1 wherein the event notifies a caregiver of a status of a
2 patient.
- 1 4. The computer of claim 1 wherein the pattern recognition algorithm operates
2 based on a sequence of the identifications.
- 1 5. The computer of claim 1 wherein at least one log entry includes a timestamp
2 for indicating the time at which the corresponding identification is received.
- 1 6. The computer of claim 5 wherein the pattern recognition algorithm operates
2 based on timestamps for the identifications.
- 1 7. The computer of claim 1 further comprising an output device coupled to the
2 central processing unit such that in operation the central processing unit activates the
3 output device upon recognizing the event and the output device provides an output
4 signal to a user.
- 1 8. The computer of claim 1 further comprising an input device coupled to the
2 central processing unit such that in operation the user acknowledges receipt of the
3 output signal via the input device.

- 1 9. The computer of claim 1 wherein in operation the central processing unit
2 notifies one or more of the other computers upon the central processing unit
3 recognizing the event.
- 1 10. The computer of claim 1 further comprising a base computer such that in
2 operation the mobile computer occasionally transfers the log entries to the base
3 computer.
- 1 11. The computer of claim 1 further comprising a set of pattern recognition
2 algorithms.
- 1 12. The computer of claim 11 wherein in response to the event being recognized,
2 the mobile computer modifies the set of pattern recognition algorithms.
- 1 13. The computer of claim 11 wherein in the computer is mobile.
- 1 14. The computer of claim 11 wherein in the computer is immobile.
- 1 15. A pervasive computing system comprising:
2 a small computer, including a wireless detector operable for detecting
3 identifications from one or more other small computers, a central
4 processing unit coupled to the wireless detector, and a memory coupled to
5 the central processing unit such that in operation the memory stores log
6 entries for the identifications; and
7 a base computer such that in operation at least one of the small
8 computers occasionally transfers the log entries to the base computer.
- 1 16. The pervasive computing system of claim 15 wherein the base computer
2 performs a data mining operation on the log entries.
- 1 17. The pervasive computing system of claim 15 wherein the central processing
2 unit of a first small computer recognizes an event based upon a pattern recognition
3 algorithm that evaluates the log entries.

1 18. The pervasive computing system of claim 17 wherein the event is a reminder
2 event.

1 19. The pervasive computing system of claim 17 wherein the event notifies a
2 caregiver of a status of a patient.

1 20. A pervasive computing system comprising a plurality of small computers,
2 each small computer comprising:
3 at least one of: a wireless emitter for emitting an identification over
4 time; and a wireless receiver for detecting identifications emitted by others
5 of the plurality of small computers over time;
6 a central processing unit coupled to the at least one of the wireless
7 emitter and the wireless detector; and
8 a memory coupled to the central processing unit such that in operation
9 the memory stores log entries for the detected identifications and further
10 such that in operation the central processing unit of a first small computer
11 recognizes an event based upon a pattern recognition algorithm that
12 evaluates the log entries.

1 21. The pervasive computing system of claim 20 wherein the event is a reminder
2 event.

1 22. The pervasive computing system of claim 20 wherein the event notifies a
2 caregiver of a status of a patient.

1 23. The pervasive computing system of claim 20 wherein the pattern recognition
2 algorithm operates based on a sequence of the identifications.

1 24. The pervasive computing system of claim 20 wherein at least one log entry
2 includes a timestamp for indicating the time at which the corresponding identification
3 is received.

1 25. The pervasive computing system of claim 24 wherein the pattern recognition

2 algorithm operates based on timestamps for the identifications.

1 26. The pervasive computing system of claim 20 wherein the first small computer
2 further comprises an output device coupled to the central processing unit such that in
3 operation the central processing unit activates the output device upon recognizing the
4 event and the output device provides an output signal to a user.

1 27. The pervasive computing system of claim 20 further comprising a base
2 computer such that in operation the first small computer occasionally transfers the log
3 entries to the base computer.

1 28. A method for a pervasive computer system comprising the steps of:
2 receiving identifications over time;
3 making a log entry for selected ones of the identifications;
4 running a pattern recognition algorithm on the log entries which
5 recognizes a event; and
6 notifying a person of the event.

1 29. The method of claim 28 wherein the pattern recognition algorithm operates
2 based on a sequence of the identifications.

1 30. The method of claim 28 wherein at least one log entry includes a timestamp
2 for indicating the time at which the corresponding identification is received.

1 31. The method of claim 28 wherein the pattern recognition algorithm operates
2 based on timestamps for the identifications.

1 32. The method of claim 28 further transferring the log entries to the base
2 computer.

1 33. The method of claim 28 wherein the event is a reminder event.

1 34. The method of claim 28 wherein a plurality of small computers provide the
2 identifications.

1 35. The method of claim 34 wherein at least some of the plurality of small
2 computers are located at various places.

1 36. The method of claim 34 wherein at least one of the plurality of small
2 computers is attached to a thing.

1 37. The method of claim 36 wherein the step of running the pattern recognition
2 algorithm determines that the thing was taken by the person from the first place to the
3 second place, that later the person left the second place without the thing, and that
4 leaving the second place without the thing comprises the reminder event.

1 38. The method of claim 36 wherein the step of running the pattern recognition
2 algorithm determines that the person left the first place and arrived at the second place
3 without the thing and that arriving at the second place without the thing comprises the
4 reminder event.

1 39. The method of claim 28 wherein the event notifies a caregiver of a status of a
2 patient.

1 40. The method of claim 39 wherein a first small computer worn by the patient
2 receives the identifications.

1 41. The method of claim 40 wherein a plurality of second small computers
2 provide the identifications and further wherein the plurality of second small
3 computers are located at various places within an environment for the patient.

1 42. A computer readable memory comprising computer code for implementing a
2 method of reminding a person upon a lapse of human memory, the method of
3 reminding the person upon the lapse of human memory comprising the steps of:
4 receiving identifications over time;
5 making a log entry for selected ones of the identifications;
6 running a pattern recognition algorithm on the log entries which
7 recognizes a event; and

8 notifying a person of the event.

1 43. A method of employing a network of first small computers to monitor a
2 patient comprising the steps of:

3 receiving identifications at a second small computer worn by the
4 patient, the identifications indicating location of the patient over time;
5 issuing a timestamp for at least some of the identifications, thereby
6 forming timestamp-identification pairs;

7 making a log entry for at least some of the timestamp-identification
8 pairs;

9 running a pattern recognition algorithm on the log entries which
10 recognizes a notification event; and

11 notifying a caregiver of the notification event.

1 44. A computer readable memory comprising computer code for implementing a
2 method of monitoring a patient by a caregiver, the method comprising the steps of:

3 receiving identifications at a second small computer worn by the
4 patient, the identifications indicating location of the patient over time;
5 issuing a timestamp for at least some of the identifications, thereby
6 forming timestamp-identification pairs;

7 making a log entry for at least some of the timestamp-identification
8 pairs;

9 running a pattern recognition algorithm on the log entries which
10 recognizes a notification event; and

11 notifying a caregiver of the notification event.